

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
21 April 2005 (21.04.2005)

PCT

(10) International Publication Number
WO 2005/034645 A1

(51) International Patent Classification⁷: **A23K 1/14**

(21) International Application Number:
PCT/US2004/032851

(22) International Filing Date: 5 October 2004 (05.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/510,683 9 October 2003 (09.10.2003) US

(71) Applicant (for all designated States except US):
CARGILL, INCORPORATED [US/US]; 15407
McGinty Road West, Wayzata, MN 55391 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **COOK, David,**
Alan [US/US]; 1323-130th Lane, Coon Rapids, MN
55448 (US). **NEWCUMB, Mark, David** [US/US]; 7950
Egret Drive, Independence, MN 55359 (US). **BEAVER,**
Michael, James [US/US]; 8767 Ridge Ponds Road,
Victoria, MN 55386 (US).

(74) Agents: **TUROSKE, Christopher, M.** et al.; Cargill,
Incorporated, 15407 McGinty Road West, Wayzata, MN
55391 (US).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: **ANIMAL FEED COMPOSITIONS**

(57) **Abstract:** The present invention disclosure describes a certain isoflavone-enhanced domestic animal feed compositions and methods of producing such feed compositions. In one particular implementation, a feed composition includes a soy meal that is no more than about (20) weight percent of the feed composition. This soy meal has a soy isoflavone content that provides the feed composition with a soy isoflavone concentration, normalized to an aglycone content of about 250-1400 parts per million on a weight basis (ppm), e.g., about 800-1200 ppm. Feed compositions in certain adaptations have demonstrated some advantages over feeds with isoflavone contents outside these ranges.



WO 2005/034645 A1